

205  
210  
215  
220  
225

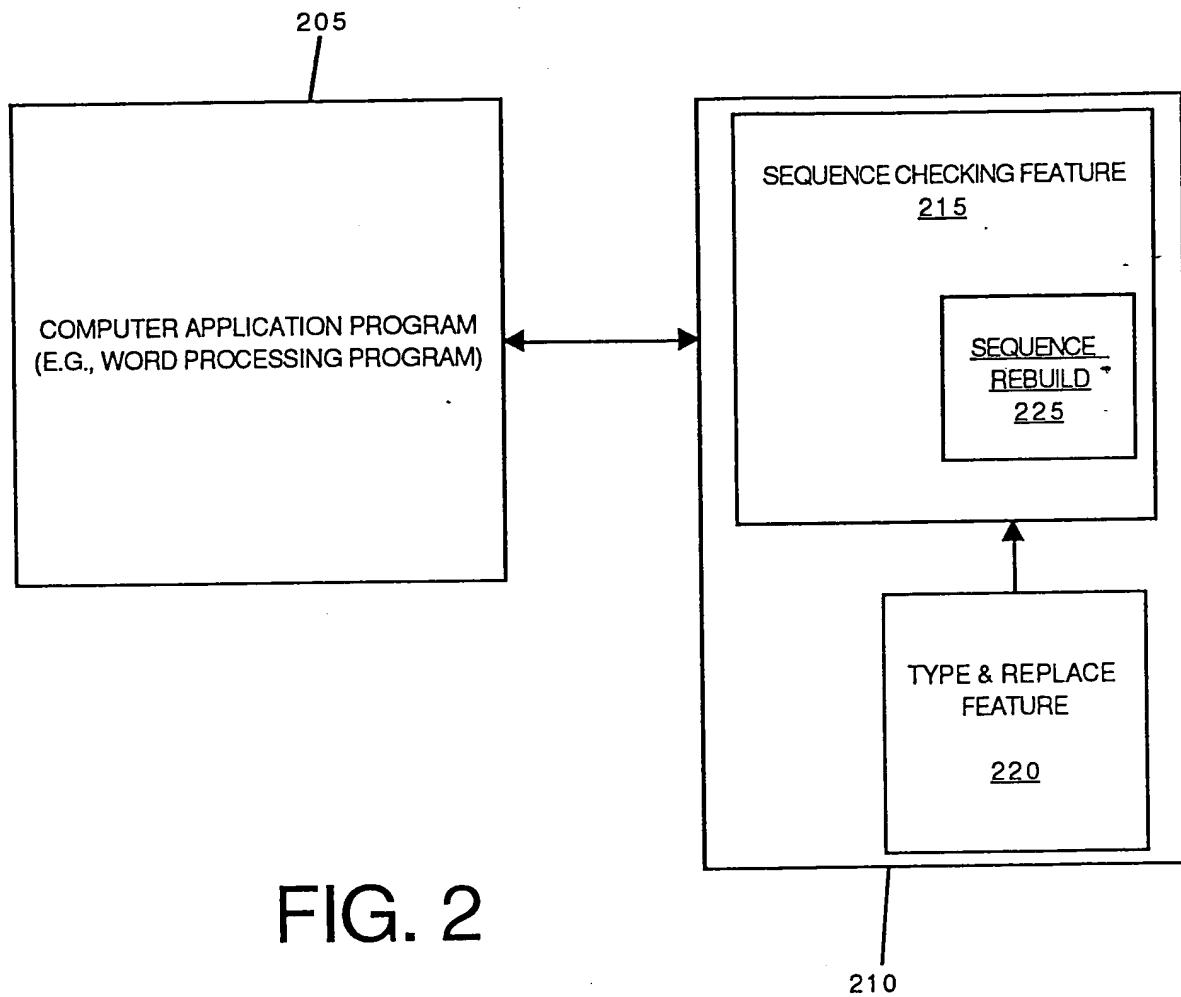


FIG. 2

SEQUENCE CHECKING AND TYPE & REPLACE  
PROGRAM MODULE

310 320 330 340 350 360

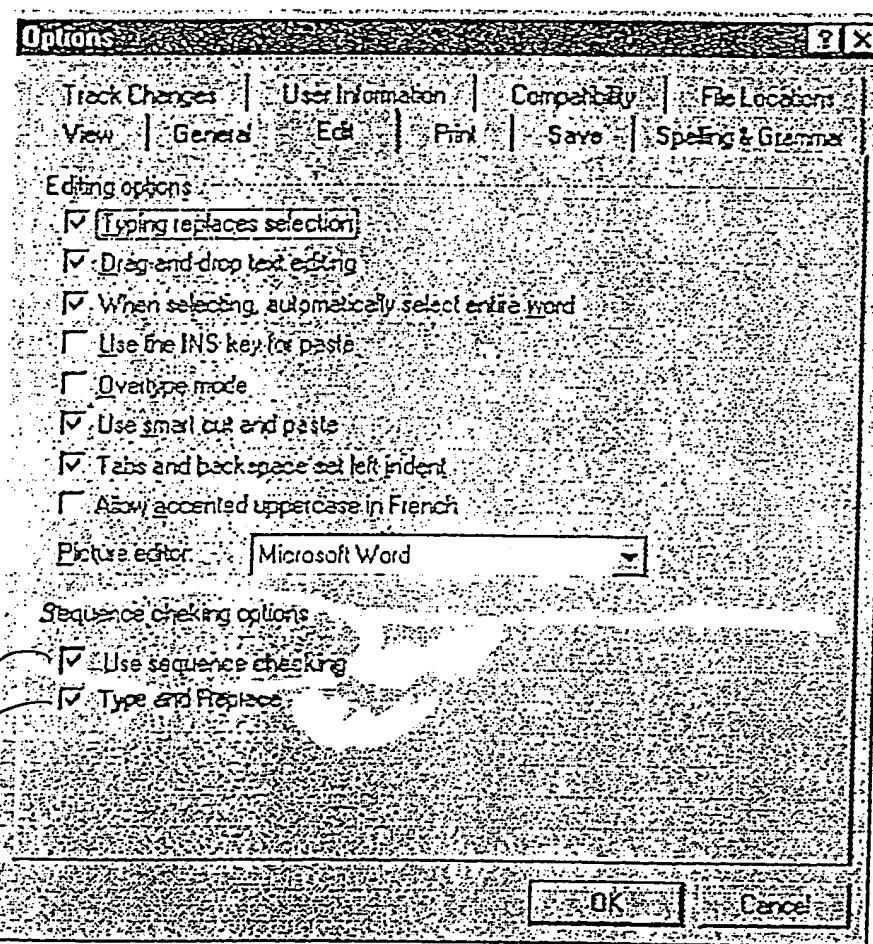


Fig. 3

CHARACTER	O	CIRL	Spa	NON	NON	LT	LV1	LV2	LV3	LV4	CONS	TONE	AD1	AD2	AD3	AD4	AV1	AV2	AV3	AV4	BV1	BV2	BD	FV1	FV2	FV3
CONTEXT	STATE																									
UN3A1	0	0	4o	3o	2o	'4o	5o	8o	20o	23o	27o	32o														
C22o	14	0																								
NON1	2	0																								
Spaa	13	0																								
N2	4	0																								
LT	5	0																								7a
LTP4	6	0																								7a
LTFV2	7	0																								7a
LV1	0																									
LVIC	8	0																								
LVICAV1	10	0																								
LVICAV1T	11	0																								
LVICAV3	12	0																								
LVICAV3T	13	0																								
LVICFV1	14	0																								
LVICFV4	15	0																								
LVICFV4FV1	16	0																								
LVICFV4FV1T	17	0																								
LVICFV4	18	0																								
LVICFV4FV1T	19	0																								
LVICFV4FV1T	20	0																								
LV2	21	0																								
LV2CT	22	0																								
LV3	23	0																								
LV3C	24	0																								
LV3CAO2	25	0																								
LV3CFV1	26	0																								
LV4	27	0																								
EV4C	28	0																								
EVACT	29	0																								
LV4CTPV1	30	0																								
LV4CFV1	31	0																								
EV4	32	0																								
CFV1	33	0																								
CFV3	34	0																								
CPV4	35	0																								
LV3CAO2	36	0																								
CAO1	37	0																								
CAO2	38	0																								
CAO3	39	0																								
LVLV1	40	0																								
LVLV1C	41	0																								
CAO3FV4	42	0																								
CAO3	43	0																								
CAV1	44	0																								
CAV1T	45	0																								
CAV1AO1	46	0																								
LVLV1CAO2	47	0																								
LVLV1C	48	0																								
CAV2	49	0																								
CAV2T	50	0																								
CAV3	51	0																								
CAV3T	52	0																								
CAV4	53	0																								
CAV4T	54	0																								
CB0	55	0																								
CB1	56	0																								
CB1T	57	0																								
CB1AO1	58	0																								
LVLV1CTFV1	59	0																								
CT	60	0																								
CTPV1	61	0																								
CTPV3	62	0																								
CTPV4	63	0																								
CBV2	64	0																								
CBV2T	65	0																								
LV3CT	66	0																								
LVLV1CT	67	0																								
LVLV1CTFV1	68	0																								
CBV4FV1	69	0																								
CBV4	70	0																								

Fig. 4

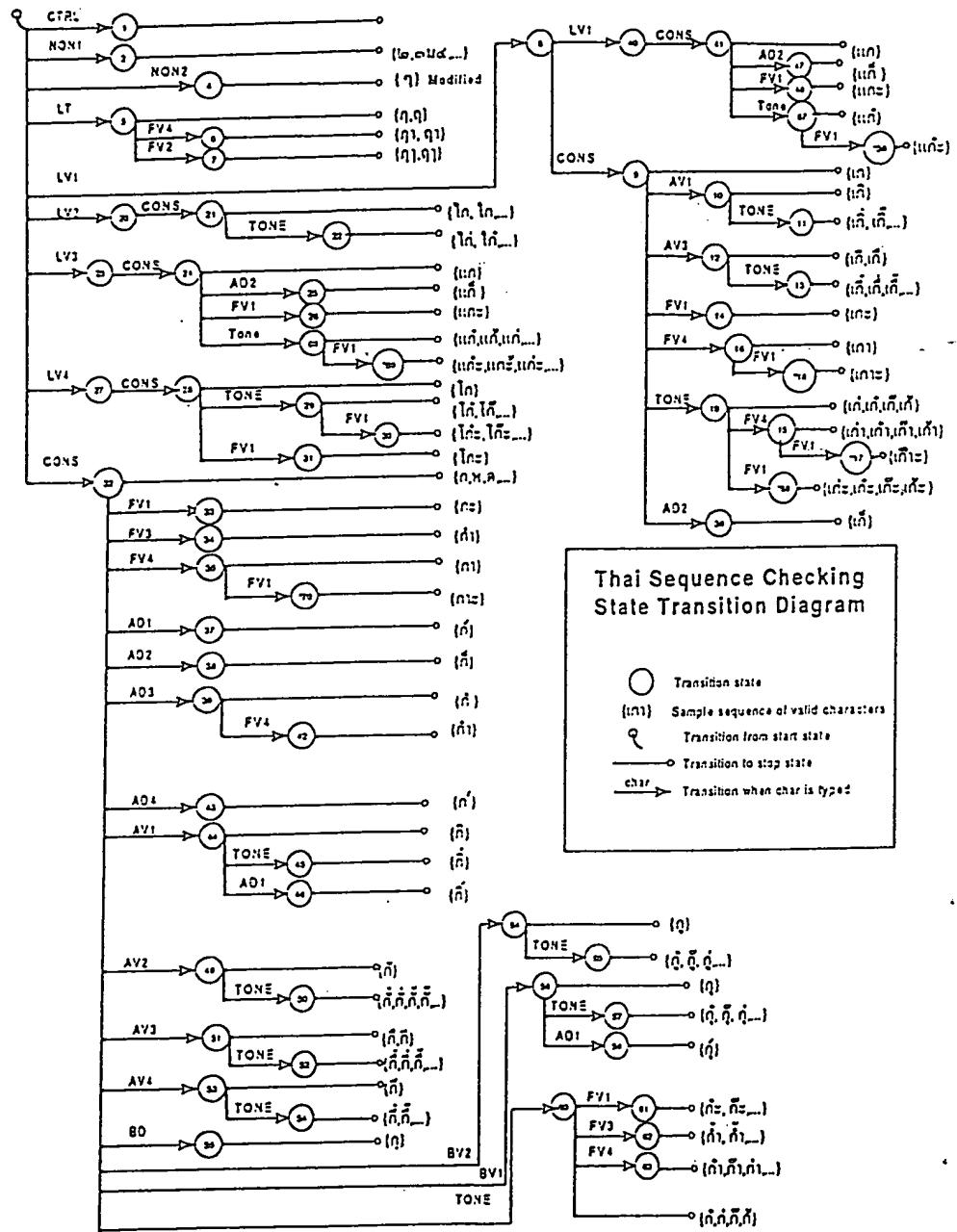


Fig. 4A

CHARACTER		{}	ind_c hars	abbr	delimit	number	ind_vo wel	norm_ conso	ext_c onso	virama	nukta	dep_vo wel	vowel _sign	accent	zerow idth chars
CONTEXT	STATE		lc	Ab	D	Nb	lv	Nc	Ec	V	Na	Dv	Vs	Ac	Zw
initial	0	0	1a	2a	3a	4a	5a	9a	10a						
lc	1	0													
Ab	2	0													
D	3	0													
Nb	4	0													
lv	5	0										7a	6a		
lvAc	6	0										8i1	6r1		
lvVs	7	0										7r1	8a		
lvVsAc	8	0										8r2	8r1		
Nc	9	10								10a					
NcNa	10	0								11a		14a	18a	20a	
NcNaV	11	12													12a
NcNaVZc	12	*						13a	10a						
NcNaVNc	13	10									10a				
NcNaDv	14	0										14r1	16a	15a	
NcNaDvAc	15	0										15r2	17i1	15r1	
NcNaDvVs	16	0										16r2	18r1	17a	
NcNaDvVsAc	17	0										17r3	17r2	17r1	
NcNaVs	18	0										16ff	18r1	19a	
NcNaVsAc	19	0										17i2	19r2	19r1	
NcNaAc	20	0										15i1	19i1	20r1	

Fig. 5

Hindi Sequence Checking  
State Transition Graph

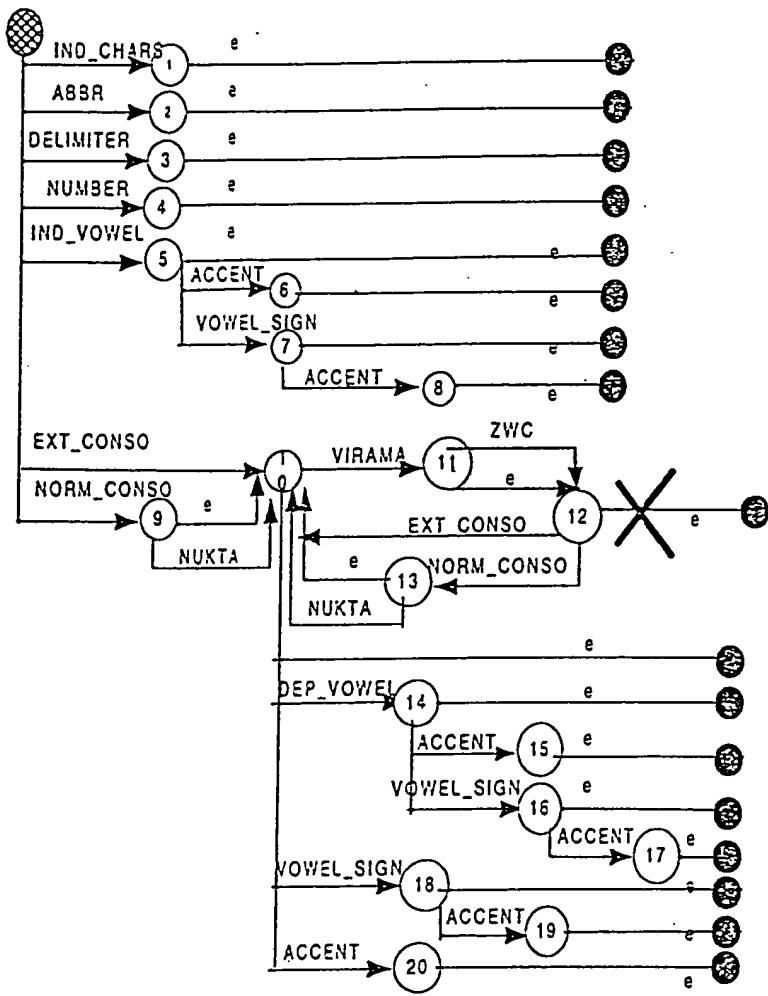
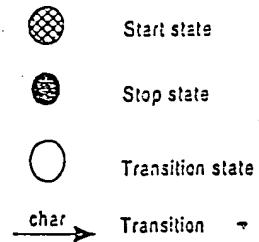


Fig. 5A

VIETNAMESE SEQUENCE CHECKING  
STATE TRANSITION GRAPH AND CHART

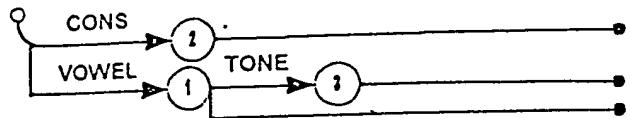


Fig. 6A

CHARACTER		Ø	VOWEL	TONE	CONS
CONTEXT	STATE		V	T	C
initial	0	0	1a		2a
V	1	0		3a	
C	2	0			
VT	3	0		2f	

Fig. 6

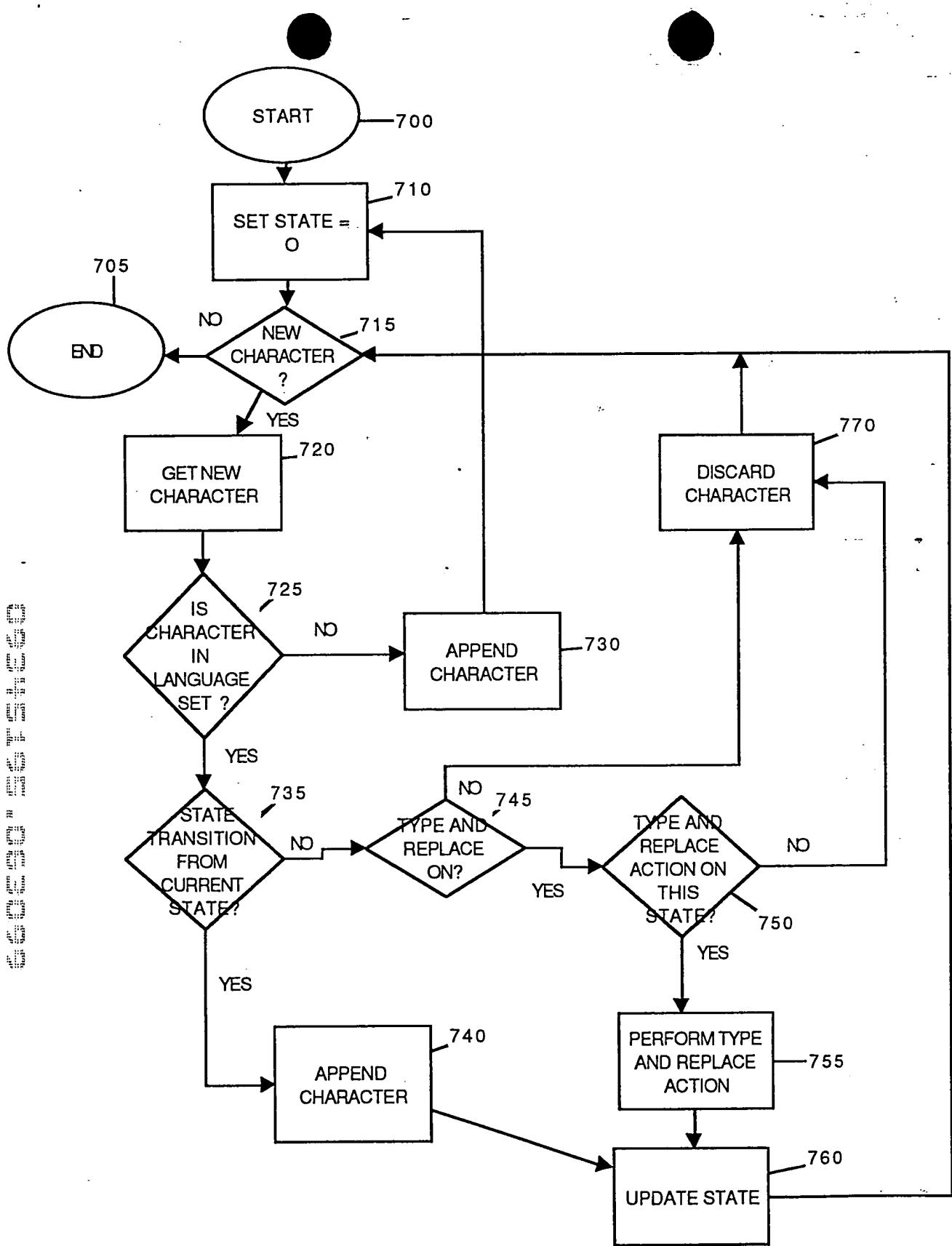


FIG. 7

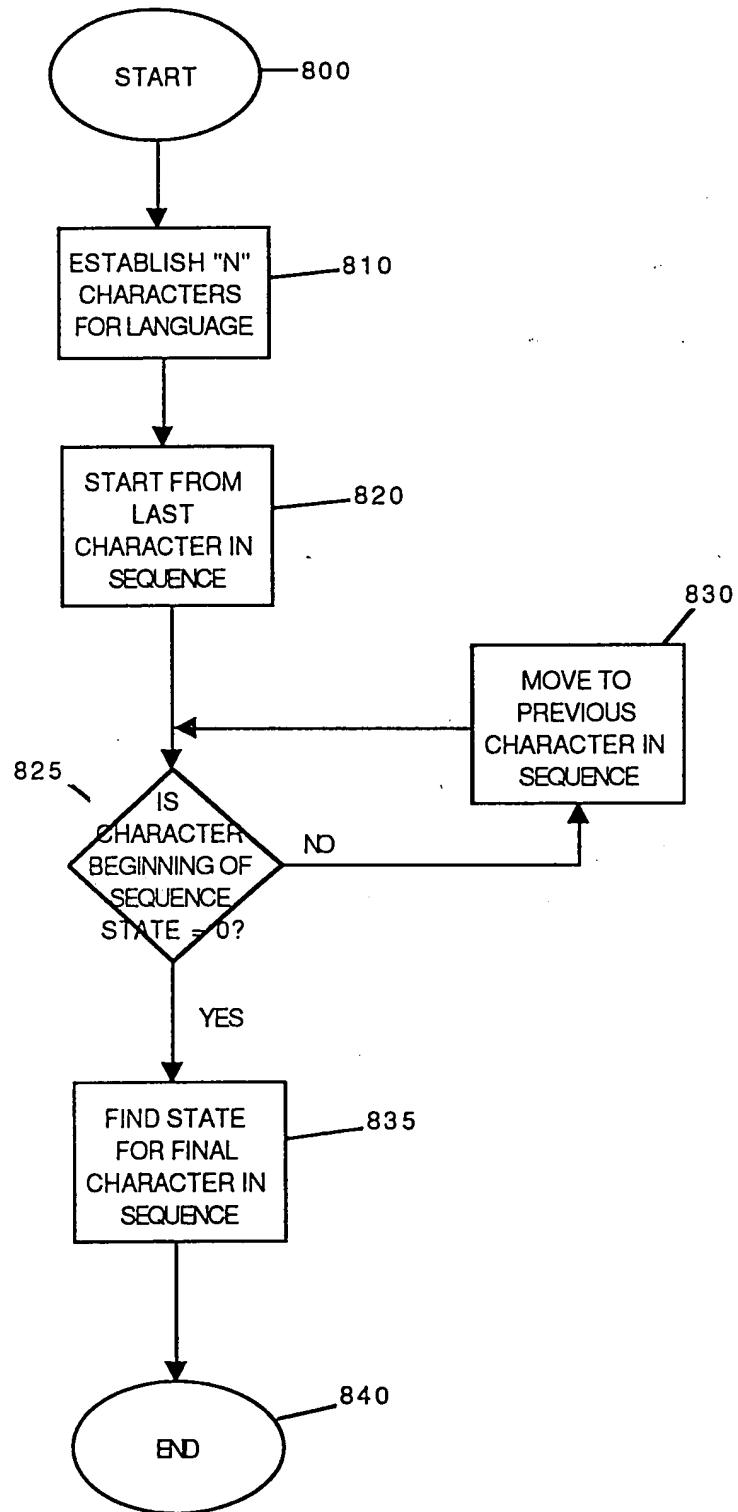


FIG. 8

SYMBOL	INDEX	ACTION	EXAMPLE
Char a	IP	Append the character char	$AB \Leftrightarrow Ca \rightarrow ABC$
Char I [n]	IP-n where n>0	Insert the character Char at the index location (before the ith character from the right)	$ABD \Leftrightarrow Ci] \rightarrow ABCD$
d[1]	IP-1	Remove the previous character	$AB \Leftrightarrow d \rightarrow A$
d <sub>n</sub>	IP-n where n>1	Remove the character at the index location	$ABC \Leftrightarrow d2 \rightarrow AC$
Char r[1]	IP-1	Replace the previous character with Char	$AC \Leftrightarrow Br \rightarrow AB$
Char rn	IP-n where n>1	Replace the character Char at the index location with the new character	$ADC \Leftrightarrow Br2 \rightarrow ABC$
C <sub>xy</sub>		Contextual information (this does not necessarily generate an action) for a possible character composition by the client application. In the Thai transition table "x" has the following values: "a" for composing the last 2 characters into LV3 (Sara-AE) or "b" for composing the last 2 characters into FV3 (Sara-Am). "y" indicates the number of the next transition state.	$ABC \Leftrightarrow Cx2 \rightarrow AD$ (if x composes B and C into D)

SYMBOL	ACTION	EXAMPLE
FV3r	Substitute the last character with FV3	$\Leftrightarrow FV3r \rightarrow$

Fig 9A

keyboard input	Output
ક	ક
,	ક્
ક	કું
ની	કની

Fig 10

keyboard input	Output
ક	ક
,	ક્
ની	ક્ની

Fig. 11

keyboard input	Output
ક	ક
,	ક્
ય	ક્ય
ની	કિય
.	કિયં
નો	કયો

Fig. 12